Journal of Biotechnology, 11 (1989) 367, 368
Elsevier

Author Index

Andersson, E. and Bailey, J.E.
The influence of the external pH on the production of modified protein A by *Staphylococcus aureus* (11) 37
Arnold, W.M., see Freitag, R. (11) 325
Asenjo, J.A., Herrera, L. and Byrne, B.
Development of an expert system for selection and synthesis of protein purification processes (11) 275

Bailey, J.E., see Andersson, E. (11) 37
Bain, E.S., Lim, V.L. and Peterlin, B.M.
Designing therapies for the treatment of AIDS (11) 313
Boland, M.J., Hesselink, P.G.M. and Hustedt, H.
Extractive purification of enzymes from animal tissue using aqueous phase systems (11) 337
Bruynesteyn, A.
Mineral biotechnology (11) 1
Byrne, B., see Asenjo, J.A. (11) 275

Chiswell, D.J., see Ortlepp, S.A. (11) 353
Clonis, Y.D., see Pearson, J.C. (11) 267

Dang, W., see Van Kimmenade, A. (11) 11
Doelle, H.W., see Doelle, M.B. (11) 25
Doelle, M.B. and Doelle, H.W.
Ethanol production from sugar cane syrup using *Zymomonas mobilis* (11) 25

Freitag, R., Schügerl, K., Arnold, W.M. and Zimmermann, U.
The effect of osmotic and mechanical stresses and enzymatic digestion on the electro-rotation of insect cells (*Spodoptera frugiperda*) (11) 325

Hammond, P.M. and Scawen, M.D.
High-resolution fractionation of proteins in downstream processing (11) 119
Herrera, L., see Asenjo, J.A. (11) 275
Hesselink, P.G.M., see Boland, M.J. (11) 337
Hughes, P., see Stewart, D.J. (11) 253
Hustedt, H., see Boland, M.J. (11) 337

Jervis, L. and Pierpoint, W.S.
Purification technologies for plant proteins (10) 161
Johansson, G. and Tjerneld, F.
Affinity partition between aqueous phases – a tool for large-scale purification of enzymes (11) 135

Kastelein, R.A., see Van Kimmenade, A. (11) 11
Kothari, R.M., see Shah, N.K. (11) 67

Lee, N.E. and Woodward, J.
Kinetics of the adsorption of *Trichoderma reesei* C30 cellulase to DEAE-Macrosorb (11) 75
Lee, S.-M.
The primary stages of protein recovery (11) 103
Liapis, A.I.
Theoretical aspects of affinity chromatography (11) 143
Lievense, J.C., Modak, J.M. and Lim, H.C.
A mathematical model for the asymmetric dynamic response in microbial systems (11) 49
Lim, H.C., see Lievense, J.C. (11) 49
Lim, V.L., see Bain, E.S. (11) 313
Lowe, C.R., see Stewart, D.J. (11) 253
Lowe, C.R., see Pearson, J.C. (11) 267

Marshall, P.J.
Purification of proteins from human blood plasma (11) 223
Modak, J.M., see Lievense, J.C. (11) 49

Nehete, P.N., see Shah, N.K. (11) 67

Ortlepp, S.A., Pollard-Knight, D. and Chiswell, D.J.
Expression and characterisation of a protein specified by a synthetic horseradish peroxidase gene in *Escherichia coli* (11) 353

Pearson, J.C., Clonis, Y.D. and Lowe, C.R.
Preparative affinity precipitation of L-lactate dehydrogenase (11) 267

0168-1656/89/$03.50 © 1989 Elsevier Science Publishers B.V. (Biomedical Division)

Peterlin, B.M., see Bain, E.S. (11) 313
Pierpoint, W.S., see Jervis, L. (10) 161
Pollard-Knight, D., see Ortlepp, S.A. (11) 353

Rombouts, F.M., see Somers, W. (11) 199

Scawen, M.D., see Hammond, P.M. (11) 119
Schmidt, C.
The purification of large amounts of monoclonal antibodies (11) 235
Schügerl, K., see Freitag, R. (11) 325
Shah, N.K., Nehete, P.N., Shah, V.D. and Kothari, R.M.
Isolation of a stable and high yielding α-amylase mutant of *Bacillus subtilis* (11) 67
Shah, V.D., see Shah, N.K. (11) 67
Somers, W., Visser, J., Rombouts, F.M. and Van 't Riet, K.
Developments in downstream processing of (poly)saccharide converting enzymes (11) 199
Stewart, D.J., Hughes, P. and Lowe, C.R.
Affinity chromatography on triazine dyes immobilized on novel perfluorocarbon supports (11) 253

Tjerneld, F., see Johansson, G. (11) 135

Valeva, M., see Vlaev, S.D. (11) 83
Van Kimmenade, A., Dang, W. and Kastelein, R.A.
Secretion of murine and human interleukin-2 by *Escherichia coli* (11) 11
Van 't Riet, K., see Somers, W. (11) 199
Visser, J., see Somers, W. (11) 199
Vlaev, S.D. and Valeva, M.
Applicability of sterilizable oxygen electrode response characteristics to oxygen transfer dynamic measurements in bioreactors (11) 83

Wheelwright, S.M.
The design of downstream processes for large-scale protein purification (11) 89
Woodward, J.
Immobilized cellulases for cellulose utilization (11) 299
Woodward, J., see Lee, N.E. (11) 75

Zimmermann, U., see Freitag, R. (11) 325

Journal of Biotechnology, 11 (1989) 369, 370
Elsevier

Subject Index

Adsorption, (11) 161; (11) 75
Affinity chromatography, (11) 143; (11) 199; (11) 223
Affinity cross-flow filtration, (11) 199
Affinity partition, (11) 135
Affinity precipitation, (11) 267
AIDS, (11) 313
Amino acid oxidase, D-, (11) 337
α-Amylase preparation, economical, (11) 67
Aqueous phase system, (11) 337
Aqueous two-phase extraction, (11) 199
Asymmetric dynamic response model, (11) 49
Axial flow system, (11) 143
Bacterial leaching, (11) 1
Batch process, (11) 25
Biological leaching, (11) 1
Bioreactor, (11) 83
Biospecific adsorption, (11) 143
B. subtilis, (11) 67
Catalase, (11) 337
Cellulase, (11) 75; (11) 299
Cellulose hydrolysis, (11) 299
Chemolithoautotroph, (11) 1
Chromatography, (11) 161; (11) 119
Clotting factors, (11) 223
Continuous centrifugation, (11) 103
Continuous process, (11) 25; (11) 143
Copper leaching, (11) 1
Cross-flow microfiltration, (11) 103
DEAE-Macrosorb, (11) 75
Downstream processing, (11) 89; (11) 103; (11) 119; (11) 199
Electro-rotation, (11) 325
Emulsion, (11) 253
Enzyme, (11) 161
Enzyme extraction, (11) 337
Enzyme purification, (11) 135; (11) 337
Ethanol production, (11) 25
External pH, (11) 37
Extraction, (11) 161
Filtration, (11) 161; (11) 103
Flavonoid, (11) 161
Fluorosurfactant, (11) 253
Gene regulation, (11) 313
Gene synthesis, (11) 353
Genetic manipulation, (11) 161
β-Glucosidase, (11) 299
Gold leaching, (11) 1
Higher yield, (11) 67
HIV, (11) 313
Immobilisation, (11) 253; (11) 299
Inducible expression, (11) 353
Industrial autofocusing, (11) 199
Insect cell, (11) 325
Interaction mechanism, (11) 143
Interleukin-2, (11) 11
Ion-exchange chromatography, (11) 223
Lactate dehydrogenase, (11) 253; (11) 267; (11) 337
Large-scale design, (11) 89
Large scale purification, (11) 235
Liquid-liquid extraction, (11) 103
Mass transfer mechanism, (11) 143
Mechanical stress, (11) 325
Mineral biotechnology, (11) 1
Monoclonal antibody, (11) 235
Mutagenesis, (11) 67
Osmotic stress, (11) 325
Oxygen transfer, (11) 83
Partitioning, (11) 161
Perfluorocarbon affinity support, (11) 253
Phenol, (11) 161
Plasma proteins, (11) 223
Polysaccharide converting enzymes, (11) 199
Precipitation, (11) 161
Protein, (11) 161
Protein A, (11) 37
Protein export, (11) 37
Protein purification, (11) 89; (11) 119; (11) 223; (11) 267; (11) 353
Proton motive force, (11) 37
Purification, (11) 161
Purification strategy selection, (11) 235
Quinone, (11) 161
Radial flow system, (11) 143
Recovery, (11) 75
Refractory gold ore, (11) 1
Replication, (11) 313

0168-1656/89/$03.50 © 1989 Elsevier Science Publishers B.V. (Biomedical Division)

Retrovirus, (11) 313
Reuse, (11) 75
Reversed micellar extraction, (11) 199
Scale-up, (11) 119
Secretion, (11) 11
Stable mutant, (11) 67
Staphylococcus aureus, (11) 37
Sterilizable oxygen electrode, (11) 83
Sugar cane syrup, (11) 25
Superoxide dismutase, (11) 337
Tannin, (11) 161
Therapy, (11) 313
Tissue culture, (11) 161
Transient specific synthesis rate, (11) 49
Triazine dye, (11) 253; (11) 267
Two-phase system, (11) 135
Unsteady state microbial growth, (11) 49
Uranium leaching, (11) 1
Use, (11) 75
Zymomonas, (11) 25